## I Claim:

1. An alkaline composition for stripping or cleaning integrated circuit substrates, comprising:

- (a) one or more bases; and
- (b) one or more metal halide compounds of the formula:

## $W_z M X_v$

where M is a metal selected from the group consisting of Si, Ge, Sn, Pt, P, B, Au, Ir, Os, Cr, Ti, Zr, Rh, Ru, and Sb; X is a halide selected from the group consisting of F, Cl, Br and I; W is selected from the group consisting of H, an alkali or alkaline earth metal, and a metal ion-free hydroxide base moiety; y is a numeral of from 4 to 6 depending on the metal halide; and z is a numeral of from 1, 2 or 3.

- A composition according to claim 1 wherein the composition is an aqueous, alkaline composition.
  - 3. The composition of Claim 2 wherein the base component (a) is a metal ion-free bases and the base is present in the composition in an amount sufficient to produce a pH of the composition of from about 10 to about 13.

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- 4. The composition of Claim 2 wherein the one or more metal halide compounds is present in the composition an amount of from about 0.5% to about 10% by weight of the composition.
- 5. The composition of claim 1 wherein the base component (a) is selected from the group consisting of ammonium hydroxide, quaternary ammonium hydroxides and diamines.
  - 6. The composition of claim 5 wherein the base component (a) is a tetraalkyl ammonium hydroxide containing alkyl groups of from 1 to 4 carbon atoms.

7. The composition of claim 2 wherein M is selected from the group consisting of Si, Ge, Zr and Sb.

5 8. The composition of claim 4 wherein M is selected from the group consisting of Si, Ge, Zr and Sb.

- 9. The composition of claim 6 wherein M is selected from the group consisting of Si, Ge, Zr and Sb.
- 10. The composition of claim 7 wherein the metal halide is selected from the group consisting of H<sub>2</sub>SiF<sub>6</sub>, H<sub>2</sub>GeF<sub>6</sub>, ((CH<sub>3</sub>)<sub>4</sub>N)<sub>2</sub>GeF<sub>6</sub>, ((CH<sub>3</sub>)<sub>4</sub>N)<sub>2</sub>SiF<sub>6</sub>, (NH<sub>4</sub>)<sub>2</sub>SiF<sub>6</sub> and (NH<sub>4</sub>)<sub>2</sub>GeF<sub>6</sub>.
- 11. The composition of claim 8 wherein the metal halide is selected from the group consisting of H<sub>2</sub>SiF<sub>6</sub>, H<sub>2</sub>GeF<sub>6</sub>, ((CH<sub>3</sub>)<sub>4</sub>N)<sub>2</sub>GeF<sub>6</sub>, ((CH<sub>3</sub>)<sub>4</sub>N)<sub>2</sub>SiF<sub>6</sub>, (NH<sub>4</sub>)<sub>2</sub>SiF<sub>6</sub> and (NH<sub>4</sub>)<sub>2</sub>GeF<sub>6</sub>.
- 12. The composition of claim 9 wherein the metal halide is selected from the group consisting of  $H_2SiF_6$ ,  $H_2GeF_6$ ,  $((CH_3)_4N)_2GeF_6$ ,  $((CH_3)_4N)_2SiF_6$ ,  $(NH_4)_2SiF_6$  and  $(NH_4)_2GeF_6$ .
  - 13. The composition of claim 10 wherein the metal halide is  $H_2SiF_6$ .
- 25 14. The composition of claim 11 wherein the metal halide is H<sub>2</sub>SiF<sub>6</sub>.
  - 15. The composition of claim 12 wherein the metal halide is H<sub>2</sub>SiF<sub>6</sub>.

16. The composition of claim 1 additionally comprising one or more additional components selected from the group consisting of organic solvents and cosolvents, metal chelating or complexing agents, silicates, fluorides, additional metal corrosion inhibitors, surfactants, titanium residue removal enhancing agents, oxidizing agents and bath stabilizing agents.

- 17. The composition of claim 2 additionally comprising one or more additional components selected from the group consisting of organic solvents and cosolvents, metal chelating or complexing agents, silicates, fluorides, additional metal corrosion inhibitors, surfactants, titanium residue removal enhancing agents, oxidizing agents and bath stabilizing agents.
- 18. The composition of claim 4 additionally comprising one or more additional components selected from the group consisting of organic solvents and cosolvents, metal chelating or complexing agents, silicates, fluorides, additional metal corrosion inhibitors, surfactants, titanium residue removal enhancing agents, oxidizing agents and bath stabilizing agents.
- 19. A composition of claim 16 comprising tetramethylammonium hydroxide, trans 20 (1,2-cyclohexylenedinitrilo)tetraacetic acid, hydrogen peroxide, dihydrogen hexafluorosilicate and water.
  - 20. The composition of claim 19 having a pH of about 11.5.
- 21. A composition of claim 16 comprising tetramethylammonium hydroxide, trans-(1,2-cyclohexylenedinitrilo)tetraacetic acid, hydrogen peroxide, dihydrogen hexafluorogermanate and water.
  - 22. The composition of claim 21 having a pH of about 11.5.

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23. A composition of claim 16 comprising tetramethylammonium hydroxide, trans-(1,2-cyclohexylenedinitrilo)tetraacetic acid, hydrogen peroxide, ammonium hexafluorogermanate and water.

5 24. The composition of claim 23 having a pH of about 11.5.

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- 25. A method for cleaning semiconductor wafer substrates, comprising: contacting a semiconductor wafer substrate having a substrate surface for a time and at a temperature sufficient to clean unwanted contaminants and residues from said substrate surface with a composition comprising the composition of claim 1.
- 26. The method of claim 25 wherein the composition is a composition of claim 2.
- 27. The method of claim 25 wherein the composition is a composition of claim 3.
  - 28. The method of claim 25 wherein the composition is a composition of claim 4.
  - 29. The method of claim 25 wherein the composition is a composition of claim 5.
  - 30. The method of claim 25 wherein the composition is a composition of claim 6.
  - 31. The method of claim 25 wherein the composition is a composition of claim 7.
- 25 32. The method of claim 25 wherein the composition is a composition of claim 8.
  - 33. The method of claim 25 wherein the composition is a composition of claim 9.
  - 34. The method of claim 25 wherein the composition is a composition of claim 10.

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The method of claim 25 wherein the composition is a composition of claim 11. 35. The method of claim 25 wherein the composition is a composition of claim 12. 36. The method of claim 25 wherein the composition is a composition of claim 13. 37. The method of claim 25 wherein the composition is a composition of claim 14. 38. The method of claim 25 wherein the composition is a composition of claim 15. 39. The method of claim 25 wherein the composition is a composition of claim 16. 40. The method of claim 25 wherein the composition is a composition of claim 17. 41. The method of claim 25 wherein the composition is a composition of claim 18. 42. The method of claim 25 wherein the composition is a composition of claim 19. 43. The method of claim 25 wherein the composition is a composition of claim 20. 44. The method of claim 25 wherein the composition is a composition of claim 21. 45. The method of claim 25 wherein the composition is a composition of claim 23. 46. The method of claim 25 wherein the composition is a composition of claim 23. 47. The method of claim 25 wherein the composition is a composition of claim 24. 48.